

## INERT GAS FUSION ANALYZER

### ABSTRACT OF THE DISCLOSURE

A single pass analyzer includes multiple infrared sensors, a catalytic converter, a scrubber and a thermal conductivity cell all coupled in series to provide a single pass (*i.e.*, one sample) analyzer which allows for fast analysis, allows for the speciation of hydrogen samples, requires no purging between different sample types, utilizes a single carrier gas, and eliminates molecular sieves and Shutze converters. The resultant analyzer provides improved quicker results with less plumbing (*i.e.*, gas conduits and valving) in a single instrument.